

Serial No. 10/747,838

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REMARKS

Applicant respectfully requests entry of this Amendment and reconsideration of the pending claims. Claims 15-26 are cancelled. Accordingly, claims 1-14 are pending in the application.

Various claims are amended to address the objections and clarify the subject matter of the invention. Applicant submits that all the objections have been addressed. Notice to that effect is respectfully requested.

Claims 1, 6, 12-14 were rejected under 35 USC § 102 as being anticipated by Welter et al. Claims 1 and 6 are amended to remove the reference to iron, and claims 12-14 depend from amended claim 6. While the claim is amended to advance prosecution, Applicant contends that the reference smelts the iron with magnesium, and at no instance is there disclosed a catalyst that "consists essentially of....iron" as defined in the unamended claim 1.

While claim 14 depends from an allowable claim, it is noted that Welter et al. does not discuss or disclose a radius of gyration at any level, and particularly not within the defined range. The only particle sizes discussed, again without any reference to the radius of gyration, for sponge iron are from 20 to 40 *micrometers*. That is more than about an order of magnitude larger than the claimed range for the radius of gyration. Conceptually, the radius of gyration is the distance that, if the entire mass of the object were all packed together at only that radius, would give you the same moment of inertia. As to inherency, the disclosure needs to always result in the anticipating manner, and that is not necessarily the case.

Claims 6-8, 12 were rejected under 35 USC § 102 as being anticipated by Keith et al. Claim 6 is amended to remove reference to palladium, and claims 7, 8 and 12 depend from the allowable amended claim.

Claims 1-14 were rejected under 35 USC § 102 as being anticipated by Sawa et al. Initially, it should be noted that the independent claims define "a catalyst composition disposed upon a storage composition", whereas Sawa et al. disclose a hydrogen-storage alloy or a catalyst. What Sawa et al. does not disclose, teach or suggest is a catalyst as

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defined in the independent claims. Further, if the hydrogen storage material itself (as disclosed in Sawa et al.) possessed the properties of the catalyst, then there would be no need to dispose a catalyst on the surface of the hydrogen storage material.

As to the nature of the disclosed material relative to the claimed materials, Applicant submits that the spot cited in the Office Action recites a combination of materials M and M' that differs in scope from the claimed invention. The passage reads as follows:

$$M_{1-100-x} M'_x (1)$$

- (wherein M is at least one element easily reactive with hydrogen to be selected from among Mg, Ca, Li, Ti, Zr, Hf, V, and Y, and the rare earth elements M' at least one element selected from among Ni, Fe, Co, Mn, Cr, Nb, Ta, Mo, W, Cu, Al, Si, Ag, Pd, Ga, Ge, Zn, Sn, In, Sb, B, C, N, O, and P, and x a numeral satisfying the expression, $30 \leq x \leq 70$ at %)

With reference to claim 1, the "consists essentially of" language rules out, by definition, a combination as taught by the cited reference. As for claim 6, the claim does not have the boundaries and limitations expressed in the cited reference, however, to expedite prosecution and secure allowance, Applicant has amended claim 6 to remove reference to those elements listed as "M" in the cited reference – "Mg, Ca, Li, Ti, Zr, Hf, V, and Y, and the rare earth elements". Thus, the cited reference requires the presence of at least one of the "M" elements, and those are removed from claim 6. The remaining claims depend from allowable claim 6, and are allowable for at least that reason.

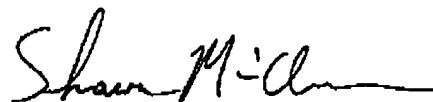
The rejections under 35 USC § 103 hinge on the disclosure of Welter et al. and Sawa et al. both discussed hereinabove. The amended claims are not anticipated by either reference, neither of which show all the elements. Without a showing of all the elements, a *prima facie* case of obviousness can not be made without even addressing the additional requirements for a proper obviousness rejection. Further, as the rejected claims depend from allowable claims, they are also allowable. Notice to that effect is respectfully requested.

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Should the Examiner believe that anything further is needed to place the application in condition for allowance, the Examiner is invited to contact the Applicant's undersigned representative at the telephone number below. Any additional fees for the accompanying response are hereby petitioned for, and the Director is authorized to charge such fees as may be required to Deposit Account 07-0868.

Respectfully submitted,



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